

**6BN8****6BN8****TWIN DIODE—HIGH-MU TRIODE**

9-PIN MINIATURE TYPE

*With heater having controlled warm-up time***GENERAL DATA****Electrical:**

Heater, for Unipotential Cathodes:

Voltage (AC or DC)	6.3	volts
Current	0.6 ± 6%	amp ←
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances:⁰**Triode Unit:**

Grid to plate	2.5	μμf
Grid to heater and cathode	3.6	μμf
Plate to heater and cathode	0.25	μμf

Diode Units:

Diode-No.1 plate to triode grid	0.06 max.	μμf
Diode-No.2 plate to triode grid	0.1 max.	μμf
Diode-No.1 cathode to all other electrodes	5	μμf
Diode-No.2 cathode to all other electrodes	5	μμf
Diode-No.1 plate to diode-No.2 plate	0.07 max.	μμf
Diode-No.1 plate to diode-No.1 cathode and heater	1.9	μμf
Diode-No.2 plate to diode-No.2 cathode and heater	1.9	μμf
Diode-No.1 cathode to diode-No.1 plate and heater	4.8	μμf
Diode-No.2 cathode to diode-No.2 plate and heater	4.8	μμf
Diode-No.1 plate to all other electrodes	3	μμf
Diode-No.2 plate to all other electrodes	3	μμf

Characteristics, Class A₁ Amplifier (Triode Unit):

Plate Voltage	100	250	volts
Grid Voltage	-1	-3	volts
Amplification Factor	75	70	
Plate Resistance (Approx.)	21000	28000	ohms
Transconductance	3500	2500	μmhos
Plate Current	1.5	1.6	ma
Grid Voltage (Approx.) for plate μa = 10	-2.5	-5.5	volts

Mechanical:

Operating Position	Any
Maximum Overall Length	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip)	2" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	See General Section

← Indicates a change.

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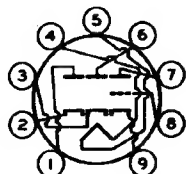
Bulb. T6-1/2
 Base. Small-Button Noval 9-Pin (JEDEC No. E9-1)
 Basing Designation for BOTTOM VIEW. 9ER

Pin 1—Diode-No.2
 Plate

Pin 2—Diode-No.2
 Cathode

Pin 3—Diode-No.1
 Cathode

Pin 4—Heater



Pin 5—Heater

Pin 6—Diode-No.1
 Plate

Pin 7—Triode Plate

Pin 8—Triode Grid

Pin 9—Triode
 Cathode

TRIODE UNIT — AMPLIFIER — Class A₁

→ Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE 330 max. volts

GRID VOLTAGE:

Positive-bias value 0 max. volts

PLATE DISSIPATION 1.7 max. watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode 200 max. volts

Heater positive with respect to cathode 200[▲] max. volts

Maximum Circuit Values:

Grid-Circuit Resistance 1 max. megohm

DIODE UNITS — Two

Maximum Ratings, Design-Maximum Values:

Values are for Each Unit

PEAK PLATE CURRENT. 54 max. ma

DC PLATE CURRENT. 9 max. ma

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode 200 max. volts

Heater positive with respect to cathode 200[▲] max. volts

^O Without external shield.

[▲] The dc component must not exceed 100 volts.

→ Indicates a change.